IN THE CLAIMS

Please amend the claims as follows:

1.-27. (Canceled)

28. (New) A standoff bioagent detection system comprising:

a detector to detect a fluorescence level; and

a controller configured to initially cause a plurality of laser diodes to generate a range of ultraviolet wavelengths;

wherein when the detector detects that a fluorescence level of an aromatic protein resulting from the range ultraviolet wavelengths exceeds a threshold, the controller is further configured to:

address selected pairs of the laser diodes to sequentially generate first and second ultraviolet wavelengths by sequentially pulsing the selected pairs in rapid succession; and

resolve in time and correlate detected fluorescence levels resulting from sequential transmission of the first and second ultraviolet wavelengths to determine a differential absorption level,

wherein the second ultraviolet wavelength includes a calibrated wavelength offset from the first ultraviolet wavelength.

29. (New) The standoff bioagent detection system of claim 28 wherein the controller is further configured to compare the differential absorption level with a calibrated differential value to determine whether an elevated level of a predetermined aromatic protein is present,

wherein the selected pairs of the laser diodes are selected to generate first and second ultraviolet wavelengths to fluoresce the predetermined aromatic protein, and

wherein the calibrated wavelength offset is selected for detection of differences in atmospheric absorption levels.

30. (New) The standoff bioagent detection system of claim 29 wherein the laser diodes comprise an addressable array of laser diodes,

wherein the first and second ultraviolet wavelengths comprise a pair of ultraviolet wavelengths, and

wherein the controller is further configured to repeat the addressing, the resolving in time and the correlation for other pairs of ultraviolet wavelengths to detect corresponding other aromatic proteins based on differential absorption levels.

31. (New) A method to detect bioagents using differential absorption comprising:

generating a range of ultraviolet wavelengths with a plurality of laser diodes; and

detecting a fluorescence level,

wherein when a detected fluorescence level of an aromatic protein resulting from the range ultraviolet wavelengths exceeds a threshold, the method further comprises:

addressing selected pairs of the laser diodes to sequentially generate first and second ultraviolet wavelengths by sequentially pulsing the selected pairs in rapid succession; and

resolving in time and correlating detected fluorescence levels resulting from sequential transmission of the first and second ultraviolet wavelengths to determine a differential absorption level,

wherein the second ultraviolet wavelength includes a calibrated wavelength offset from the first ultraviolet wavelength.

32. (New) The method of claim 31 further comprising comparing the differential absorption level with a calibrated differential value to determine whether an elevated level of a predetermined aromatic protein is present,

wherein the selected pairs of the laser diodes are selected to generate first and second ultraviolet wavelengths to fluoresce the predetermined aromatic protein, and

wherein the calibrated wavelength offset is selected for detection of differences in atmospheric absorption levels.

33. (New) The method of claim 32 wherein the laser diodes comprise an addressable array of laser diodes,

wherein the first and second ultraviolet wavelengths comprise a pair of ultraviolet wavelengths, and

wherein when the detected fluorescence level resulting from the range ultraviolet wavelengths exceeds the threshold, the method further comprises repeating the addressing, the resolving in time and the correlating for other pairs of ultraviolet wavelengths to detect corresponding other aromatic proteins based on differential absorption levels.